

Second Graders on the Map
Social Studies
Grade 2
Julie E. Bednark and Cindy M. Morden

OBJECTIVES:

1. The students will be able to point out differences between street maps and aerial photographs, and will be able to identify some of the things on the maps.
2. The students will learn the cardinal directions of north, south, east and west, and will be able to point them out on a map. They will also become familiar with the compass rose and where it is usually located on a map.
3. The students will begin to learn their address and what it looks like written down.

BENCHMARKS:

ISTE National Educational Technology Standards for Students

Prior to completion of Grade 2, students will:

- Use a variety of media and technology resources for directed and independent learning activities. (*Basic operations and concepts, Technology productivity tools*)
- Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (*Social, ethical and human issues*)
- Demonstrate positive social and ethical behaviors when using technology. (*Social, ethical, and human issues*)
- Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (*Technology productivity tools*)

Michigan Technology Standards

Content Standard 1: All students will use and transfer technological knowledge and skills for life roles (family member, citizen, worker, consumer, lifelong learner).

Benchmark 2 (Consumer): Identify technological sources of information.

Content Standard 2: All students will use technologies to input, retrieve, organize, manipulate, evaluate, and communicate information.

Benchmark 1 (Communication): Input and retrieve information from a technological system (including the practice of word processing skills).

Benchmark 2 (Retrieve / Manipulate / Communicate): Process information retrieved electronically.

Content Standard 3: All students will apply appropriate technologies to critical thinking, creative expression, and decision making.

Benchmark 2 (Creative Expression): Use a variety of technologies to express ideas (voice, data, video, graphics, etc.).

Content Standard 5: All students will apply ethical and legal standards in planning, using and evaluation technology.

Benchmark 1 (Planning and Evaluating): Practice ethical and legal standards related to technology in the home and at school (e.g. follow classroom rules, respect personal property, etc.)

Benchmark 4 (Using): Explain how individuals are responsible for their technology related actions and decisions.

Michigan Social Studies Standards

Content Standard 2.3: All students will describe, compare, and explain the locations and characteristics of economic activities, trade, political activities, migration, information flow, and the interrelationships among them (Location, Movement and Connections)

Benchmark 1: Identify locations of significance in their immediate environment and explain reasons for their location.

Benchmark 2: Describe the natural characteristics of places and explain some basic causes for those characteristics.

Content Standard 5.1: All students will acquire information from books, maps, newspapers, data sets and other sources, organize and present the information in maps, graphs, charts and timelines, interpret the meaning and significance of information, and use a variety of electronic technologies to assist in accessing and managing information. (Information Processing)

Benchmark 1: Locate information using people, books, audio/video recordings, photos, simple maps, graphs and tables.

Benchmark 2: Acquire information from observation of the local environment.

Benchmark 3: Organize information to make and interpret simple maps of their local surroundings and simple graphs and tables of social data drawn from their experience.

Content Standard 5.2: All students will conduct investigations by formulating a clear statement of a question, gathering and organizing information from a variety of sources, analyzing and interpreting information, formulating and testing hypotheses, reporting results both orally and in writing, and making use of appropriate technology. (Conducting Investigations)

Benchmark 2: Gather and analyze information in order to answer the question posed.

MOTIVATION:

What student interests provide the basis for this lesson?

The students have been learning about their community, and have been looking at maps as a way to identify where things are located. We read the books, *A Bird's Eye View* and *Me on the Map* to help the students better understand maps and what they are used for. After having the students make a picture of their home on Kid Pix, the students wanted to know more about maps, and where their home was located in the community by looking on a map.

How do you engage students in this activity?

We went to the computer lab, and used the ELMO machine to read the book *A Bird's Eye View*. The students watched their computer monitors as I read the story. Using the ELMO really gave the students the idea that they were looking down from above. We also talked about what they could see from above as they are looking down.

MATERIALS:

- computer lab (includes 25 computers, ELMO machine, and COM-WEB system)
- books: *A Bird's Eye View* and *Me on the Map*
- Kid Pix software (already loaded on computers)
- Smart Board (includes laptop and projector)
- Internet access to www.Mapquest.com
- construction paper folders, which include the following:
 - preprinted maps: street map and aerial photograph of each student's home
 - printed copies of each student's home
 - 3x5 cards with student's address on them
 - strips of lined paper
 - glue, scissors, a pencil
 - digital camera / digital video camera

PROCEDURE:

NOTE: Using the digital camera and digital video camera, take pictures of the students working on this mini-project.

1. The purpose of this part of the lesson is to have the students think about what their bedroom would look like is looked at from above, like they are looking at it from in the sky. The students will use Kid Pix to draw their bedroom and label what is in their room.

In the computer lab:

2. Have the students find a computer in the lab and sit down at it. Tell them to log into Kid Pix and then "put their mouse to sleep" by turning it over. This will help keep the students from playing with them. While the students are logging into Kid Pix, set up the ELMO machine so that they can read and see the pictures of the book as you read to them.
3. When the students are ready, activate the COM-WEB to take control of their computers. They will now see whatever is on the screen at the teacher station. Place the first book, *A Bird's Eye View* on the ELMO. Introduce it and begin reading the selected sections of the book, marked with a sticky note. (Make sure to read about the compass rose and what it is used for: showing which way is north, south, east and west. Talk about what the student's can see from 'above' when looking at the book and the maps within the book.) When finished reading *A Bird's Eye View*, take a look at *Me On The Map*. Talk about how they can identify what is in the picture by using the 'legend' or the 'key'.

4. Next, show the picture of the bedroom you created using Kid Pix. Talk about how it is harder to tell what is in this room because everything is either square or rectangle shaped. Mention however, everything is labeled. Explain to the students that today they will be using Kid Pix to draw what their bedroom would look like if looked at from above. Open up Kid Pix on the teacher station computer and demonstrate what they should do, and also point out what tools they are allowed to use to draw their bedroom (meaning no stampers; this should be the students own, original work). Tell them that they can also use the typewriter to label each thing in their room. As you introduce the tools, have the students point to the tool on the screen so that they know where they are located. Remind them how to save their work by going to "File" and then "Export a Graphic" as a ".jpeg" onto the "A" drive. Once they understand the directions, release them from the COM-WEB. They may begin drawing their room.
5. Circulate around the lab, assisting the students when needed. Again, when they are finished drawing their room, remind them how to save. Make sure they put their disk in before they even go to "File" and "Export a Graphic" or they might lose their drawing. (One way to help them save their picture in case the computer freezes is to press the "Print Screen" button on the keyboard. Then the picture is saved and it can be opened in Microsoft Word.) Once their disk is in, watch them save their work.
6. When the students are finished drawing their bedrooms, they may begin drawing a picture of what their home looks like from the front, also on Kid Pix. Tell the students that we are doing a really cool activity with their homes, and they need to do their best. They can use the stampers to help them with their homes.

In the classroom:

7. This part of the lesson is to allow the students to explore the concept of maps. The students will be able to look at maps and gain information from them. They will be able to use maps to find their homes. They will also practice writing their address.
8. Have the students find their seats quickly. The Smart Board will already be oriented, with the class web page projected on the screen. The construction paper folders will already be created with everything already cut down to size.
9. With the students sitting in their seats, begin to read *Me On The Map*. Talk about the different maps shown in the book. Compare the street map in the book to the map of Keego Harbor on the wall. Talk about the differences that they see between them.
10. When finished reading the book, ask the students how they think they could find out where they or others live? Why is it important to know your address? Tell them that if they needed help from the police or fire department, they will ask you for your address so that they can come help you. The mailman needs to know your address so he/she knows where to drop off your mail.

11. Have the students turn toward the Smart Board. Show the students how to find www.mapquest.com. Talk about how you found a really cool web site on the Internet, and that with this web site, you can see where you and others you know live. Before continuing, talk about going on the Internet: "Should you tell an adult you know that you are going on the Internet?" "Should you click on the little windows that pop up or that flash at you without mom or dad's permission?" Talk about using the Internet safely.
12. On www.mapquest.com, type in the address of the school. Zoom into the street map, and show them where the school is located. After showing them the major roads that they are familiar with, click on the button that takes you to the aerial photographs. "By clicking on this button, I can see a really cool picture of our school." Bring up the aerial photo of the school, and zoom in. See if the students can identify any places around the school in the photograph (the playground, the restaurant next door, etc.) Next tell the students what you did for them. "Since we don't have time to show everyone's house, I typed in your address and found maps and aerial photographs of where everyone lives. Then we printed out the picture of your home that you drew on Kid Pix the other day. We put everything in this construction paper folder. All you need are scissors, glue and a pencil."
13. Pull out a model of what the students will be doing. Using the picture of the school and the schools' address, show the students that they will be copying their address onto lined paper that is included in the folder. Once they are done copying their address, they will glue it to their piece of construction paper. They will then take their maps and picture of their home and glue them onto the construction paper. Once they are finished, then they can show others in the room, but not until they are finished. It is important that they get everything glued on first.
14. Walk around the classroom, assisting the students when needed. After the students have written their address on the lined paper, collect the 3x5 cards, and encourage them to look closely at the maps once they are glued on. What do they notice about them? Have them look for the cardinal directions of north, south, east and west. Point out the directions to them on the map. "On a map, north always points to the top of the paper, and south always points to the bottom."
15. When they are finished, collect the construction paper maps. After school, when they are dry, they will be hung up in the hallway, along with a sign that says, "Second Graders On The Map." When walking to and from the room, point out the maps to the students, and ask they to look for similarities and differences between the different maps.

TOOLS AND RESOURCES:

(Include all Web sites and specific software)

- computer lab (includes 25 computers, ELMO machine, and COM-WEB software)
- Kid Pix software
- TTI Laptop
- Smart Board and projector
- high speed Internet connection
- web site: www.mapquest.com
- Digital cameras and 3 1/2' floppy disks / digital video camera

ASSESSMENT of LEARNING:

- Could the students point out the differences between the maps? Could they identify what was on the maps?
- Could the students remember what the cardinal directions were? Could they show where you usually find a compass on a map? Could the students point out the directions on a map?
- Were the students able to draw using a mouse? Were the pictures recognizable?
- Were the students able to follow directions by putting their finger on the different tools that they are allowed to use?
- Were the students able to recognize familiar places on the different maps, such as the school?
- Were the students able to tell the difference between different maps? When looking at aerial photographs, could they point out different buildings and roads?
- Did the students already know their address?
- Could the students understand the directions of north, south, east and west? Could they find the words on the different maps? Could they point out which way the directions point on a map?

CREDIT (INCLUDING CONTACT INFORMATION):

Julie Bednark, University of Michigan-Dearborn, Dearborn, MI

E-mail: bednark98@yahoo.com

Second Grade Student Teacher

Roosevelt Elementary, Keego Harbor, MI

West Bloomfield School District

Cindy Morden, Second Grade Teacher

Roosevelt Elementary School, Keego Harbor, MI

West Bloomfield School District

E-Mail: morden@westbloomfield.k12.mi.us

www.westbloomfield.k12.mi.us/roosevelt/second02/index.html

REFLECTION:

The students really liked being able to draw their bedrooms. They always like being able to draw using Kid Pix. Some of them found it hard to do. Some drew what their room looked like from above, while others drew from above, but the small pictures inside their

room where drawn from a side view. Using a mouse helped the students with fine motor control, which some of them need.

The students also had a fun time draw their home. Some just drew their house, while others included trees, flowers, people and animals. Some even included Santa Clause on their roof.

The students even found the maps really cool. Many of them were distracted from putting the project together by looking at the maps and seeing what they could recognize. Many of them could recognize different things located around the school when we showed them the pictures of the school on the Smart Board. They found the playground, the restaurant next door, and the city hall and police department behind the school. After everyone's maps were posted in the hallway, the students constantly stopped to look at theirs and others maps.